OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for SC119948

CHM (NM_000390) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CHM (NM_000390) Human Untagged Clone
Tag:	Tag Free
Symbol:	CHM
Synonyms:	DXS540; GGTA; HSD-32; REP-1; TCD
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF:

>OriGene ORF within SC119948 sequence for NM_000390 edited (data generated by NextGen Sequencing)

ATGGCGGATACTCTCCCTTCGGAGTTTGATGTGATCGTAATAGGGACGGGTTTGCCTGAA
TCCATCATTGCAGCTGCATGTTCAAGAAGTGGCCGGAGAGTTCTGCATGTTGATTCAAGA
AGCTACTATGGAGGAAACTGGGCCAGTTTTAGCTTTTCAGGACTATTGTCCTGGCTAAAG
GAATACCAGGAAAACAGTGACATTGTAAGTGACAGTCCAGTGTGGCAAGACCAGATCCTT
GAAAATGAAGAAGCCATTGCTCTTAGCAGGAAGGACAAAACTATTCAACATGTGGAAGTA
TTTTGTTATGCCAGTCAGGATTTGCATGAAGATGTCGAAGAAGCTGGTGCACTGCAGAAA
AATCATGCTCTTGTGACATCTGCAAACTCCACAGAAGCTGCAGATTCTGCCTTCCTGCCT
ACGGAGGATGAGTCATTAAGCACTATGAGCTGTGAAATGCTCACAGAACAAACTCCAAGC
AGCGATCCAGAGAATGCGCTAGAAGTAAATGGTGCTGAAGTGACAGGGGAAAAAGAAAAC
CATTGTGATGATAAAACTTGTGTGCCATCAACTTCAGCAGAAGACATGAGTGAAAATGTG
CCTATAGCAGAAGATACCACAGAGCAACCAAAGAAAAACAGAATTACTTACTCACAAATT
ATTAAAGAAGGCAGGAGATTTAATATTGATTTAGTATCAAAGCTGCTGTATTCTCGAGGA
TTACTAATTGATCTTCTAATCAAATCTAATGTTAGTCGATATGCAGAGTTTAAAAATATT
ACCAGGATTCTTGCATTTCGAGAAGGACGAGTGGAACAGGTTCCGTGTTCCAGAGCAGAT
GTCTTTAATAGCAAACAACTTACTATGGTAGAAAAGCGAATGCTAATGAAATTTCTTACA
TTTTGTATGGAATATGAGAAATATCCTGATGAATATAAAGGATATGAAGAGATCACATTT
TATGAATATTTAAAGACTCAAAAATTAACCCCCAACCTCCAATATATTGTCATGCATTCA
ATTGCAATGACATCAGAGACAGCCAGCAGCACCATAGATGGTCTCAAAGCTACCAAAAAC
TTTCTTCACTGTCTTGGGCGGTATGGCAACACTCCATTTTTGTTTCCTTTATATGGCCAA
GGAGAACTCCCCCAGTGTTTCTGCAGGATGTGTGCTGTGTTTGGTGGAATTTATTGTCTT
CGCCATTCAGTACAGTGCCTTGTAGTGGACAAAGAATCCAGAAAATGTAAAGCAATTATA
GATCAGTTTGGTCAGAGAATAATCTCTGAGCATTTCCTCGTGGAGGACAGTTACTTTCCT
GAGAACATGTGCTCACGTGTGCAATACAGGCAGATCTCCAGGGCAGTGCTGATTACAGAT
AGATCTGTCCTAAAAACAGATTCAGATCAACAGATTTCCATTTTGACAGTGCCAGCAGAG
GAACCAGGAACTTTTGCTGTTCGGGTCATTGAGTTATGTTCTTCAACGATGACATGCATG
AAAGGCACCTATTTGGTTCATTTGACTTGCACATCTTCTAAAACAGCAAGAGAAGATTTA
GAATCAGTTGTGCAGAAATTGTTTGTTCCATATACTGAAATGGAGATAGAAAATGAACAA
GTAGAAAAGCCAAGAATTCTGTGGGCTCTTTACTTCAATATGAGAGATTCGTCAGACATC
AGCAGGAGCTGTTATAATGATTTACCATCCAACGTTTATGTCTGCTCTGGCCCAGATTGT
GGTTTAGGAAATGATAATGCAGTCAAACAGGCTGAAACACTTTTCCAGGAAATCTGCCCC
AATGAAGATTTCTGTCCCCCTCCACCAAATCCTGAAGACATTATCCTTGATGGAGACAGT
TTACAGCCAGAGGCTTCAGAATCCAGTGCCATACCAGAGGCTAACTCGGAGACTTTCAAG
GAAAGCACAAACCTTGGAAACCTAGAGGAGTCCTCTGAATAA

Clone variation with respect to NM_000390.2

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_000390 unedited
TACTAATTTGTNAATACGCACTCTCTATAGGGNNCGGCCGCGCAATTCGGCACGAGGTCA
AGATGGCGGATACTCTCCCTTCGGAGTTTGATGTGATCGTAATAGGGACGGGTTTGCCTG
AATCCATCATTGCAGCTGCATGTTCAAGAAGTGGCCGGAGAGTTCTGCATGTTGATTCAA
GAAGCTACTATGGAGGAAACTGGGCCAGTTTTAGCTTTTCAGGACTATTGTCCTGGCTAA
AGGAATACCAGGAAAACAGTGACATTGTAAGTGACAGTCCAGTGTGGCAAGACCAGATCC
TTGAAAATGAAGAAGCCATTGCTCTTAGCAGGAAGGACAAAACTATTCAACATGTGGAAG
TATTTTGTTATGCCAGTCAGGATTTGCATGAAGATGTCGAAGAAGCTGGTGCACTGCAGA
AAAATCATGCTCTTGTGACATCTGCAAACTCCACAGAAGCTGCAGATTCTGCCTTCCTGC
CTACGGAGGATGAGTCATTAAGCACTATGAGCTGTGAAATGCTCACAGAACAAACTCCAA
GCAGCGATCCAGAGAATGCGCTAGAAGTAAATGGTGCTGAAGTGACAGGGGAAAAAGATA
ACCATTGTGATGATAAAACTTGTGTGCCATCAACTTCAGCAGAAGACATGAGTGAAAATG
TGCCTATAGCAGAAGATACCACAGAGCACCCAAAGAAAACCAGAATTACTTACTCACAAA
ATATTAAAGAAGGCAGGAGATTTAATATTGATTTGTATCAAAGCTGCTGTATTCTCGAAG
ATTACCTAATGATCTTCTAATCAAACCTATGGTAGTCGATATGCAGAGTTTAAAACTATA
CCAAGATCTTTGCATTTCGAAAAGAACGATTGAACAAGTTCCGCGTTCCAGAGCAGATGC
TTTTATAGCAACCACTTACTATGCAGGAAACCGAAGCTAATGAAATTT

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_000390 unedited
GTCCGCGGCCGCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTGTGAGACAGAGTCTTG
CTCTGTCACCCACGCTGGAGTGCAGTGGCAAAATCTTGGCTCACTGCAACCTCCGCCTCC
CTGGTTCAAGTGAGTCTGCTACCTCATCTTCAAAGTAGCTGGGATTACAGGTGCCCACCA
TAACACCCAGCTAAAATTTTGTATTTTTAGTAGAGACAGGGTTTCGCCATGTTGGCCAGG
CTGGTCTCGAACTCCTGACCTCAAGTGATCTACCCACCTCAGCTTCCCAAAGTGCTGGGA
TTACAGGCAGCCCTAACGTTTTTATGTAGTGTATATTAGGGCTTACCAACTGTCATACAC
AATTTGGAGTCCTTGGTGGTTGCAGGTTTACCTACCAGAAAAGGAATAAAACAATTTATA
GAGTGTTTTCCTTAGTAATATTTCAAAACCACAATTCTACTTGTTACTATTTTTACTGGT
CTGTAAGACTATAAAATACTACTTTAAAAAAGAAATTTTCATTTAAAAAGCTTAATGCAA
TAAAAACACTGTGATCTATTTTGTTTGGAAGTTGACTGACAGCAAGCAATTATTTCCTGC
GTGAGACTTTTGAGATTCATCAAGTCAATGGGAAAATTCTAAAACAATTTTCTTCTGGCA
AACCGATTCTAAACATGGCATTGCATTGTCTTCATAACCATTCTCATATAGTAAGCATAG
TAATACTATTTCCACTTTATATATGGAGAAACGTANGCTCAGAAGTTAAACAATTTACCA
CATATCATCAGTACGACAGCCAGAATTAAATTAAGTCTGTAGACAATTAGCCTATACTCT
TAGTACTTGACAGACAGAATATTCAAAACCCATGAGCCTATCACACCCTTCCTTNCATTC
TTTCATTCCTCATTATTGACCTTTNCCAGTATGGAATAAATTAAC

Restriction Sites: NotI-NotI

ACCN: NM_000390

Insert Size: 3590 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	1. Centrifuge at 5,000xg for 5min. 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA. 3. Close the tube and incubate for 10 minutes at room temperature. 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom. 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	NM_000390.1, NP_000381.1
RefSeq Size:	2115 bp
RefSeq ORF:	1962 bp
Locus ID:	1121
UniProt ID:	P24386
Cytogenetics:	Xq21.2
Domains:	GDI
Protein Families:	Druggable Genome
Gene Summary:	This gene encodes component A of the RAB geranylgeranyl transferase holoenzyme. In the dimeric holoenzyme, this subunit binds unprenylated Rab GTPases and then presents them to the catalytic Rab GGTase subunit for the geranylgeranyl transfer reaction. Rab GTPases need to be geranylgeranyled on either one or two cysteine residues in their C-terminus to localize to the correct intracellular membrane. Mutations in this gene are a cause of choroideremia; also known as tapetochoroidal dystrophy (TCD). This X-linked disease is characterized by progressive dystrophy of the choroid, retinal pigment epithelium and retina. Alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Mar 2016] Transcript Variant: This variant (1) represents the predominant transcript and encodes the longest isoform (a). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.